

March 27, 2003

Joan Bozik
EPA/Environmental Photographic Interpretation Center
12201 Sunrise Valley Drive
555 National Center
Reston, VA 20192

RE: N - FORCER Site (TS-PIC-20305593S)

Dear Mrs. Bozik,

Please find enclosed the Interim Report for the N - FORCER Site (TS-PIC-20305593S), consisting of four dates of photographs with an accompanying text.

Sincerely,



George Mika
Imagery Analyst

US EPA RECORDS CENTER REGION 5



467462

INTERIM REPORT

TS-PIC-20305593S
MARCH 2003

INTERIM AERIAL PHOTOGRAPHIC ANALYSIS OF
N-FORCER SITE

Dearborn, Michigan

by

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for

Environmental Services
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Contract No. 68-D-00-267

Work Assignment Manager

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NOTICE

As an interim product, this document has not gone through the complete EPA quality assurance cycle. Any errors that are discovered during preparation of the final report will be corrected therein.

METHODOLOGY

This report was prepared using a standard methodology that includes the following steps:

- data identification and acquisition
- photographic analysis and interpretation
- graphics and text preparation

These steps are described in this section. Subsections also address details related to specific kinds of analyses that may be required to identify environmental features such as surface drainage and wetlands. All operational steps and processes used to perform this work (including data identification and acquisition, photographic analysis and interpretation, and graphics and text preparation) adhere to strict QA/QC guidelines and standard operating procedures (SOPs). These guidelines and procedures are documented in the Master Quality Assurance Project Plan (QAPP) for the Remote Sensing Support Services Contract, 68-D-00-267 (LMS, 2002).

Data identification and acquisition included a search of government and commercial sources of historical aerial photographs to identify and obtain photographs with optimal spatial and temporal resolution and image quality for the study area. In addition, U.S. Geological Survey (USGS) topographic maps were obtained to show the study area location and to provide geographic and topographic context.

To conduct this analysis, the photographic analyst obtained diapositives (transparencies) of historical aerial photographs showing the study area. Diapositives are most often used for analysis instead of prints because the diapositives have superior photographic resolution. Diapositives show minute details of significant environmental features that may not be discernible on paper prints.

A photographic analyst uses a stereoscope to view adjacent, overlapping pairs of diapositives on a backlit light table. In most cases, the stereoscope is capable of various magnifications up to 60 power. Stereoscopic viewing involves using the principle of parallax (observing a feature from slightly different positions) to observe a three-dimensional representation of the area of interest. The stereoscope enhances the photo interpretation process by allowing the analyst to observe vertical as well as horizontal spatial relationships of natural and cultural features.

The process of photographic analysis involves the visual examination and comparison of many components of the photographic image. These components include shadow, tone, color, texture, shape, size, pattern, and landscape context of individual elements of a photograph. The photographic analyst identifies objects, features, and "signatures" associated with specific environmental conditions or events. The term "signature" refers to a combination of components or characteristics that indicate a specific object, condition, or pattern of environmental significance. The academic and professional training, photo interpretation experience gained through repetitive observations of similar features or activities, and deductive logic of the analyst as well as background information from collateral sources (e.g., site maps, geologic reports, and soil surveys) are critical factors employed in the photographic analysis.

The photographic analyst records the results of the analysis by using a standard set of annotations and terminology to identify objects and features observed in the diapositives. Significant findings are annotated on overlays attached to the photographs in the report and are discussed in the accompanying text. Annotations that are self-explanatory may not be discussed in the text. The annotations are defined in the Fold-out Legend at the end of the report and in the text when first used.

Objects and features are identified in the graphics and text according to the photographic analyst's degree of confidence in the evidence. A distinction is made between certain, probable, and possible identifications. When the photographic analyst believes the identification is unmistakable, no qualifier is used. Probable is used when a limited number of discernible

characteristics allow the photographic analyst to be reasonably certain of a feature's identification. Possible is used when only a few characteristics are discernible and the photographic analyst can only infer a feature's identification.

The prints presented in this report have been reproduced, either by photographic or computer methods, from the original film. Reproductions are made from the original film and may be either contact (the same size) prints or enlargements, depending on the scale of the original film. Any computer-produced prints used in this report are generated from scans of the film at approximately 1,300 dots per inch (dpi) and are printed at 600 dpi. Although the reproductions allow effective display of the interpretive annotations, they may have less photographic resolution than the original film. Therefore, some of the objects and features identified in the original image and described in the text may not be clearly discernible on the prints in this report.

Study area boundaries shown in this report were determined from aerial photographs or collateral data and do not denote legal property lines or ownership.

PHOTOGRAPHIC ANALYSIS

APRIL 20, 1951

The N-Forcer site is bounded by industrial facilities to the north and west, by railroad tracks to the east, and by Henn Street to the south, which provides vehicular access to the site. Open lots are present in a residential area to the south of Henn Street.

The site contains two adjoining buildings (B) in the north central portion of the site that appear to be the production facility and will be identified as such for the remainder of this report. A third building is located in the northwestern portion of the site. Two rail spurs leading from the railroad to the east service the production facility. Four railcars (RC) are present on the rail spurs.

Probable light-toned particulate material (not annotated) is noted on portions of the roof of the production facility. Light-toned (LT) material (M) is seen adjacent to the southwestern portion of the production facility and to the east of the production facility. Probable (PROB) light-toned mounded material (MM) is also noted to the northwest of the production facility. A probable conveyor (CON) leads from the northern side of the production facility towards the rail spur to the north. Six trailers (TL) are visible on an unpaved parking lot (not annotated) south of the production facility.

To the west of the production facility, an area of disturbed ground (DG) is noted. This area of disturbed ground extends to the southern portion of the site. A drainage pathway extends from the northwest corner of the production facility into the southern portion of the site.

NOVEMBER 21, 1966

Light-toned mounded material is seen adjacent to the southwestern side of the production facility, where light-toned material was previously noted on the 1951 photograph. Further to the southwest, a smaller area of light-toned mounded material is present. Light-toned material and possible (POSS) light-toned mounded material are noted to the east of the production facility. Multi-toned (MLT) mounded material is visible to the west of the production facility.

Three trailers and two areas of possible staining are seen on the parking lot south of the production facility. Four trailers are present east of the production facility. The disturbed ground noted west and southwest of the production facility on the 1951 photograph is no longer observed and portions of this area are now used for vehicle parking.

Four railcars are visible on the rail spurs.

APRIL 18, 1990 (FIGURE 4)

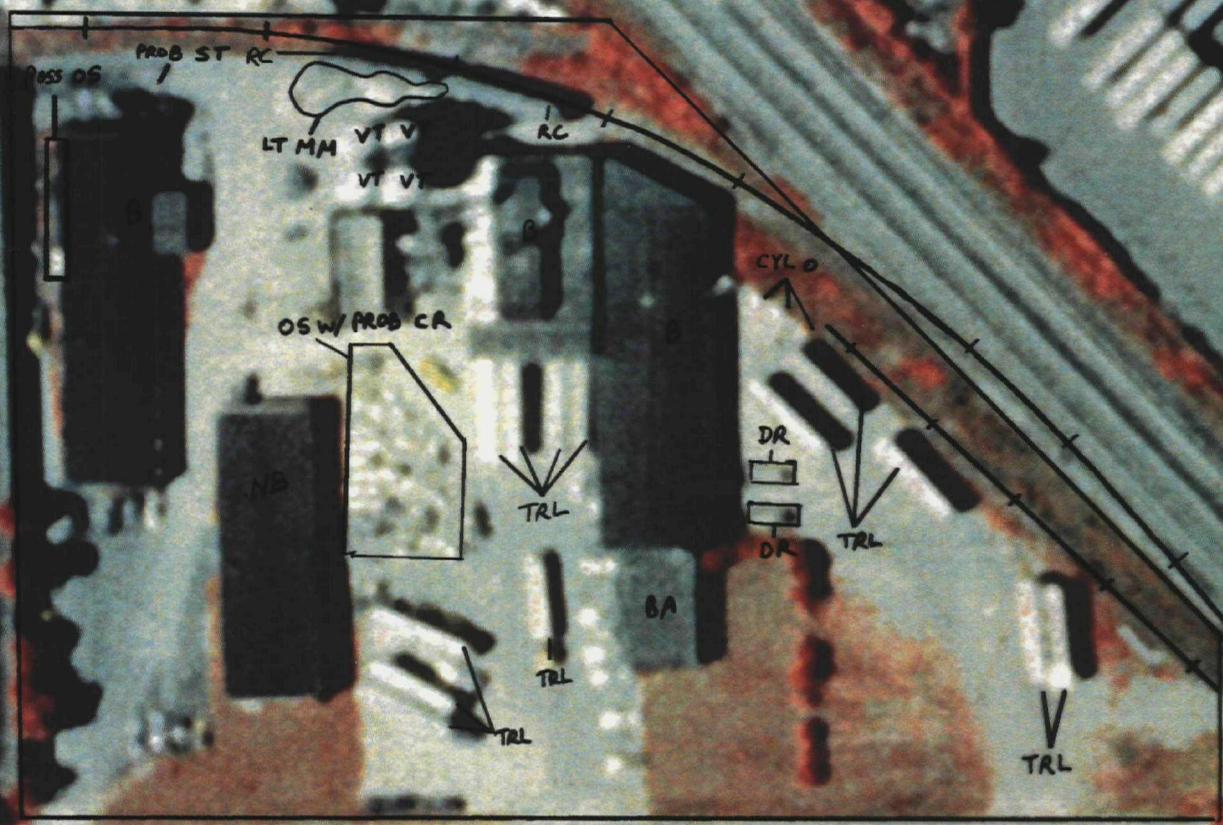
Two building additions have been constructed on the production facility; one south of the vertical tanks and one linking the western end of the production facility to another, formerly freestanding building. A building addition has also been constructed on the west side of the building in the western portion of the site.

An open storage area with possible containers (C) is visible to the northwest of the production facility. An open storage area containing unidentified objects (not annotated) is seen adjacent to the eastern side of the production facility. Two dumpsters are present east of the production facility.

Six trailers are visible to the southeast of the production facility. A group of five trailers are observed on the parking lot adjacent to the south side of the production facility and six trailers are visible to their south.

Legend

B	-	BUILDING
BA	-	BUILDING ADDITION
C	-	CONTAINER(S)
CON	-	CONVEYOR
CR	-	CRATE(S)
CYL	-	CYLINDRICAL
DG	-	DISTURBED GROUND
DR	-	DUMPSTER
LT	-	LIGHT-TONED
M	-	MATERIAL
MLT	-	MULTI-TONED
MM	-	MOUNDED MATERIAL
MT	-	MEDIUM-TONED
NB	-	NEW BUILDING
O	-	OBJECT
OS	-	OPEN STORAGE
POSS	-	POSSIBLE
PROB	-	PROBABLE
RC	-	RAILCAR
RO	-	RUNOFF
ST	-	STAIN(ING)
TL	-	TRAILER
VT	-	VERTICAL TANK
---		ACCESS ROAD
—		FEATURE BOUNDARY
+ +		RAIL SPUR

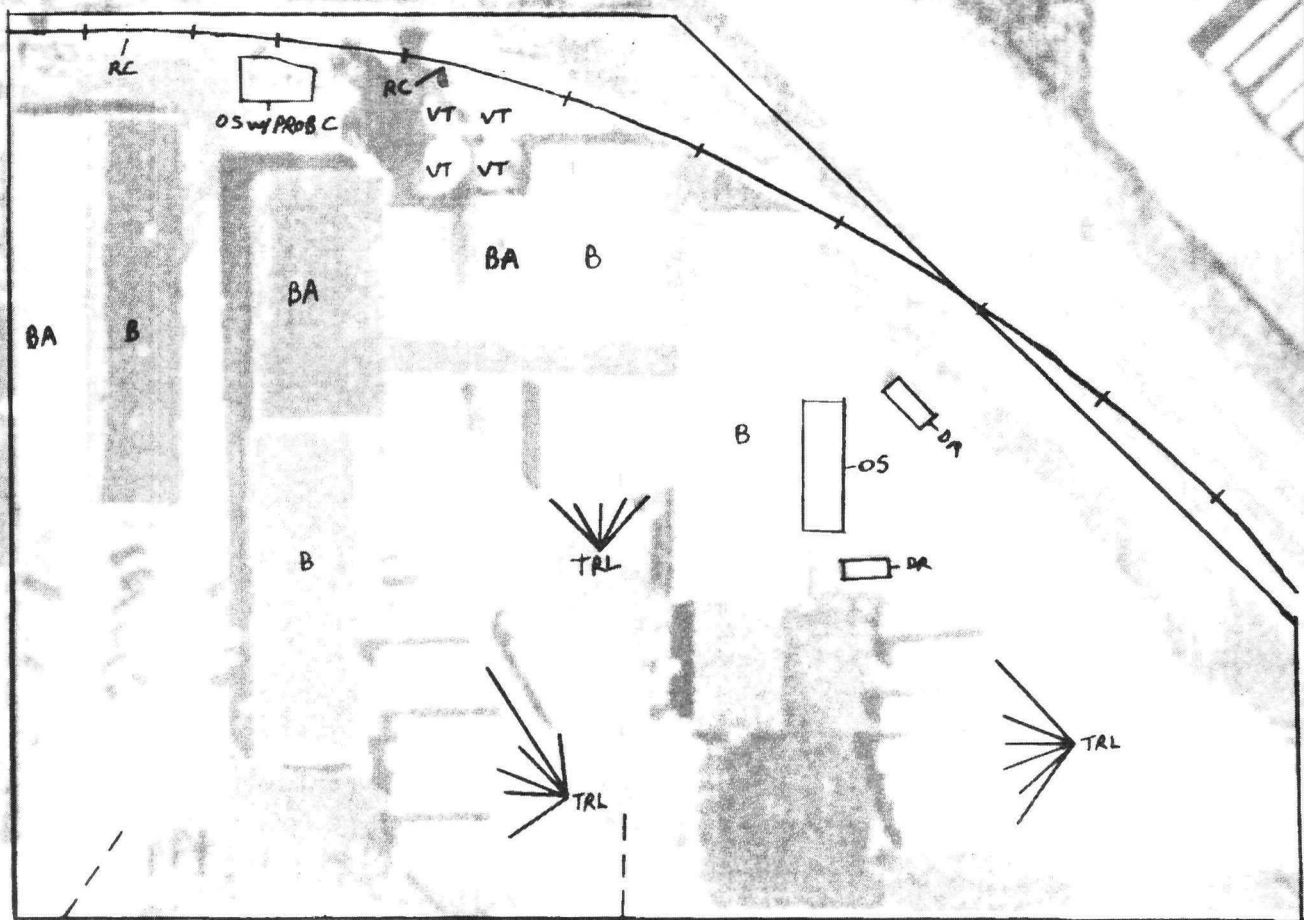


HENN ST.

N-FORCER

JULY 17, 1978

APPROX. SCALE 1:1,020

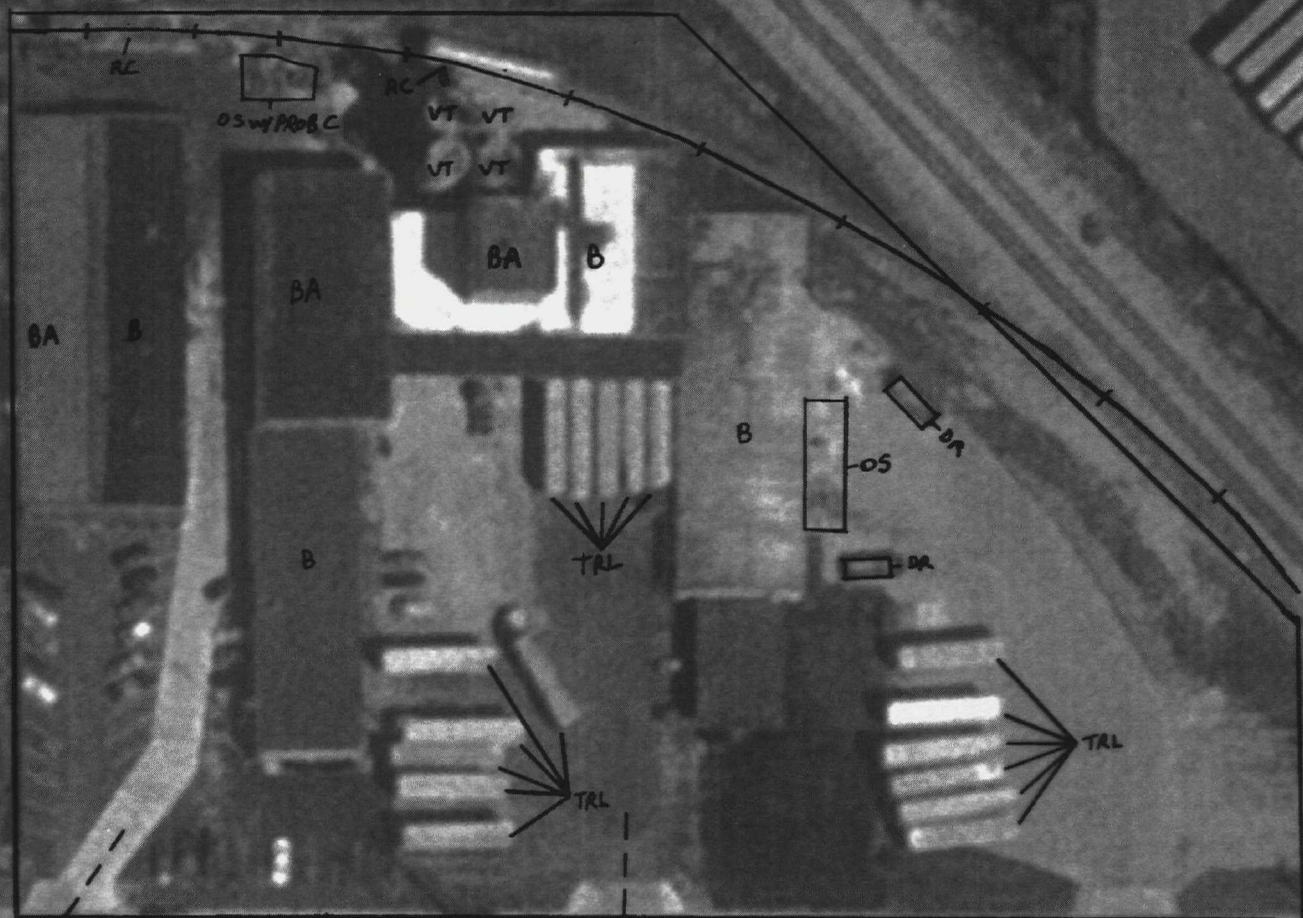


HENN ST.

N-FORCE

APRIL 18, 1990

APPROX. SCALE = 1:1,160



HENN ST.

N-FORCE

APRIL 18, 1990

APPROX. SCALE = 1:1,160

APPROX. SCALE 1:100

NOVEMBER 21, 1966

N-POWERS

HENN ST.

